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## **EUROPEAN PATENT APPLICATION**

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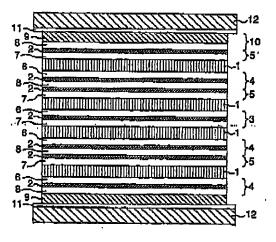
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#### (54)Solid electrolyte fuel cell stack

in a polymer electrolyte membrane type fuel cell (1) employing a high polymer ion exchange membrane as an electrolyte, a fuel cells stack is produced at low cost by easily constituting flow passages for a fuel gas (6), an oxidizing agent gas (7) and a cooling water (8) which have been conventionally constituted by a cutting process being hard to process and hard to reduce

a cost. The fuel gas passage (6), the oxidizing agent gas flow passage (7) and the cooling water flow passage (8) are constructed by a combination of a diffuser constituted by a conductive porous body or a corrugated plate (15) and an elastic gasket, whereby a cutting process is not required. The number of parts can be reduced and operating performance can be improved by integrally forming the gasket with the separator.

FIG.1



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